joints vary in the different specimens of the same species even to a greater degree than the above authors state exists between Cnephalia and Spallanzania, the former cannot be maintained even in the sense of a sub-genus, but must be considered a synonym of Spallanzania.

The species referred to above as having been assigned to Acroglossa by Giglio-Tos, is evidently the form previously described by Van der Wulp as *Prospherysa vilis* (Biol. Cent. Am., Diptera, II, 121), which Brauer and Bergenstamm make the type of their new genus, Chaetogaedia (l. c., V, 336). Giglio Tos remarks on the close

resemblance between his species and Frontina acroglossoides Town.,; the latter is a synonym of Baumhaueria analis V. d. W., and also belongs to Chaetogaedia.

The forms discussed above may be listed as follows (synonyms in italics): Spallanzania Desv. *Cnephalia* Rond.; *Acroglossa* Will.

hesperidarum Will. (Acroglossa).

Pseudogonia ruficauda Town.;

P. obsoleta Town.

Chaetogaedia B. B.

analis V. d. W. (Baumhaueria).

Frontina acroglossoides Town.
vilis V. d. W. (Prospherysa)

Acroglossa tessellata Giglio-Tos.

## WOOLLY LEAF-GALL MADE BY A SPECIES OF CALLIRHYTIS ON SCRUB OAK.

BY C. H. TYLER TOWNSEND, BROWNSVILLE, TEX.

In the Can. Ent., 1892, p. 200, I mentioned the breeding of a hymenopteron, determined by Dr. Riley as Andricus sp. (?) from a woolly leafgall on scrub oak, found in the Organ Mts., Donna Ana Co., N. M.

On Nov. 12, 1892, this gall was found on scrub oak well up in the Organ Mts., above the Modoc vine. Sections that were opened on this date contained pupae. The galls were also noticed same date on scrub oaks at the base of the same mountains, at Riley's water.

On March 16, 1893, there were found issued and dead, from galls collected

Nov. 12, 1892, eleven gall-flies of a beautiful metallic green color. This is the above species. There was also found one specimen, larger in size and of a flavous brown color, apparently different, which had issued with the rest.

The gall may be described as follows:—

Gall.—Diameter, about 12 to 15 mm.; greatest height, 8 to 9 mm. On under side of leaf, woolly subhemispherical or domeshaped in form, attached to the leaf by small rootlets or stems on the basal flattened surface, a stem to each principal section of the gall. Color, pink externally, shaded to slightly brownish or yellowish in mature or

old specimens, white internally, the basal portion somewhat darker. Gall formed of sections, each section at base containing a cell in which lives a larva or pupa, sections formed of more or less straight woolly-like brittle fibers all extending upward (downward on leaf) from and around the cell which forms basal portion of each section; the fibers are provided with fine spine-like spicules, the more terminal ones arranged in whorls. The fibers are white except on tips, which are pink or pale brownish yellow. These terminal ends of the fibers with their spicules are what form the external visible surface of the gall, and give it its woolly appearance. The basal portion of each section containing the cell is hard, pale greenish in color, and 5 or 6 mm. long by about 2 mm. wide external measurement. The cell contained within is about 4 mm. long by 1 mm. wide.

Described from several specimens.
On leaves of *Quercus undulata* var.

wrightii. Organ Mts., southern N. M.

Specimens of the gall-maker, sent to Mr. Wm. H. Ashmead, were determined as Callirhytissp. Two parasites of the latter that had been bred were determined as Syntomaspis sp. and Torymus sp.

The Callirhytis is an ample-winged light rufous species. Head and dorsum of abdomen darker rufous. Wings clear. Length 2 mm.; of wing 3 mm. The Syntomaspis is a small, elegantly formed, bright metallic green species, with ovipositor nearly as long as abdomen and thorax together, and hyaline wings. Tarsi yellowish. Length about 15 mm.; of ovipositor, 15 mm.

The Torymus is a very small, elongate, dark green species, with tarsi whitish. Wings clear. Length, 1\frac{1}{5} min.

## LOCAL BUTTERFLY NOTES.

On June 2, 1895, while butterfly hunting in Wellesley, I saw and nearly captured a fine specimen of *Papilio cresphontes*. This is the first I remember to have seen flying in Wellesley although Mr. Thomas Smith at the Hunnewell gardens has one taken by him a few years ago on those grounds.

On June 7 Lieut, W. Robinson captured in the street opposite his house in Cambridge a perfect specimen of Basilarchia arthemis which had evidently just emerged. It was busily engaged sucking up the moisture from a muddy spot in the street and was taken without difficulty, making no attempt to fly. I can find no record of this butterfly's occurrence in Cambridge, hence communicate the fact.

The aberrations fasciata and obliterata of the butterfly Heodes hypophlacas have been particularly numerous about Cambridge this season, Lieut. Robinson having taken a great many and well marked individuals of the former and several good examples of the latter. In one specimen of obliterata not a spot or trace of a spot on the upper or under surface of the fore-wings was visible, except the two included within the cell, which appear to be always present. He also took a remarkable example of the aberration fulliola in which the upper surface of the fore-wings are a light brassy yellow except near the base on the costal margin where the usual coppery red is visible in a slight degree. This specimen is in excellent condition. I may add, bowever, that the taking of the above aberrations is the result of intelligent collecting since. Mr. Robinson looked over hundreds in the fields only selecting those that appeared interesting or peculiar.

Shelley W. Denton.

Wellesley, Mass.